#### **Proposed Item for Biobased Designation**

The following biobased product information has been collected to support item designation by USDA for the Federal Biobased Product Preferred Procurement Program (FB4P). This summary reflects data available as of July 26, 2006.

Title: Graffiti and Grease Removers

**Description:** Materials used to remove automotive, industrial, and kitchen soils and oils including greases, paints, and other coatings from hard surfaces including both painted and unpainted surfaces.

**Manufacturers Identified:** 27 manufacturers producing Graffiti and Grease Removers have been identified through internet searches, manufacturer's directories, trade associations, and company submissions.

**Industry Associations Investigated:** The following industry associations have been investigated for member companies producing Graffiti and Grease Removers:

- Masonry Magazine
- The Restaurant Association of Maryland
- Biobased Manufacturers Association
- United Soybean Board
- Solvents Industry Association
- American Solvents Council
- Association of the Wall and Ceiling Industry

**Commercially Available Products Identified:** Of the manufacturers identified, 43 Graffiti and Grease Removers are commercially available on the market.

**Product Information Collected:** Specific product information including company contact, intended use, biobased content, and performance characteristics have been collected on 13 Graffiti and Grease Removers.

**Industry Performance Standards:** Product information submitted by biobased manufacturers indicate that have typically been tested to the following industry standards:

- Graffiti Performance Testing
- Adhesive Testing in Screen-printing

**Samples Tested for Biobased Content:** 12 samples of Graffiti and Grease Removers have been submitted to independent laboratories for biobased content testing as specified by ASTM standard D6866-04.

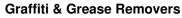
**Biobased Content Data:** Results from biobased content testing of Graffiti and Grease Removers indicate a range of content percentages from 24% minimum to 100% maximum biobased content

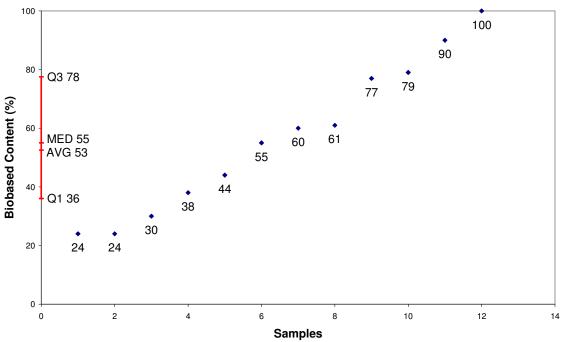
as defined by ASTM D 6866-04. A detailed distribution of biobased content levels is included as Appendix A.

**Products Submitted for BEES Analysis:** Life-cycle cost and environmental effect data for 2 Graffiti and Grease Removers have been submitted to NIST for BEES analysis.

**BEES Analysis:** The life-cycle costs of the submitted Graffiti and Grease Removers range from \$22.00 minimum to \$22.16 maximum per usage unit. The environmental scores range from 0.0446 minimum to 0.0646 maximum. A detailed summary of the BEES results is included as Appendix B.

## Appendix A - Biobased Content Data





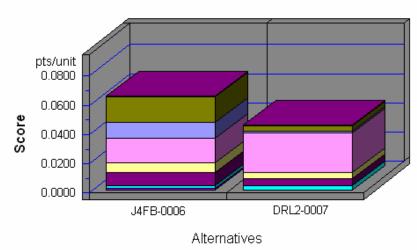
	Manufacturers Identified	Products Identified	C14	BEES
1	VF27	VF27-0008	24	
2	IS44	IS44-0003	24	
3	IS44	IS44-0004	30	
4	C9PX	C9PX-0007	38	
5	TXH8	TXH8-0013	44	
6	Y8EG	Y8EG-0009	55	
7	DRL2	DRL2-0007	60	yes
8	J3TP	J3TP-0029	61	
9	WTV7	WTV7-0001	77	
10	TXH8	TXH8-0012	79	
11	J4FB	J4FB-0006	90	yes
12	WAMQ	WAMQ-0008	100	

### Appendix B - BEES Analysis Results

### **Functional Unit: One Gallon**

# **Environmental Performance**

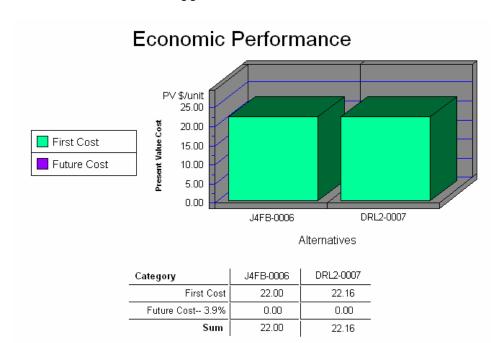




Note: Lower values are better

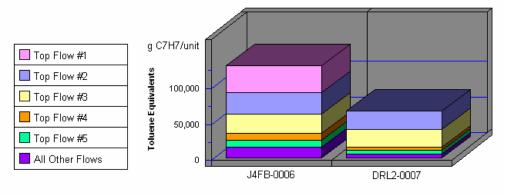
Category	J4FB-0006	DRL2-0007
Acidification5%	0.0000	0.0000
Crit. Air Pollutants6%	0.0007	0.0003
Ecolog. Toxicity11%	0.0172	0.0039
Eutrophication5%	0.0112	0.0012
Fossil Fuel Depl5%	0.0168	0.0268
Global Warming16%	0.0064	0.0043
Habitat Alteration16%	0.0000	0.0000
Human Health11%	0.0089	0.0045
Indoor Air11%	0.0000	0.0000
Ozone Depletion5%	0.0000	0.0000
Smog6%	0.0021	0.0032
Water Intake3%	0.0013	0.0004
Sum	0.0646	0.0446

### Appendix B (continued)



<sup>\*</sup>No significant/quantifiable performance or durability differences were identified among competing alternatives. Therefore, future costs were not calculated.

# Human Health by Sorted Flows\*



Alternatives

#### Note: Lower values are better

Category	J4FB-0006	DRL2-0007	
Cancer(a) Atrazine (C8H14CIN5	37,769.00	0.00	
Cancer(w) Arsenic (As3+, As5+	29,429.86	25,471.46	
Cancer(w) Phenol (C6H5OH)	26,940.48	23,893.64	
Cancer(a) Arsenic (As)	10,072.61	4,259.88	
Cancer(a) Dioxins (unspecifie	9,113.65	5,169.51	
All Others	15,585.16	6,272.70	
Sum	128,910.77	65,067.18	

<sup>\*</sup>Sorted by five topmost flows for worst-scoring product